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Department of Energy

Richland Operations Office
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JAN 30 1991

91-PPB-346

Mr. Charles E. Findley
U.S. Environmental Protection Agency
1200 Sixth Avenue
Seattle, WA 98101

Mr. Timothy L. Nord
Hanford Project Manager
Washington Department of Ecology
Mail Stop PV-11
Olympia, WA 98504-8711

Dear Messrs. Findley and Nord:

305-B STORAGE UNIT PART B PERMIT APPLICATION: DRAFT TEXT REVISIONS,

This letter formally transmits the DOE-RL/Pacific Northwest Laboratory (PNL) responses to the Washington Department of Ecology (Ecology) Notice of Deficiency (NOD) comments, dated April 26 and September 28, 1990, for the 305-B Storage Unit Part B Permit application, confirming our transmittal to M. Lerchen at the Unit Managers' Meeting of January 10. Per the agreement between DOE-RL and Ecology at the October 24 Unit Managers' Meeting, the response is submitted in text revision form rather than republishing the entire Part B Permit application at this time. The permit application will be republished when sitewide issues relating to the 305-B Unit are resolved.

Please accept our apology for the delay in submittal of this response. The delay agreed upon at the November 29 Unit Managers' Meeting was exceeded due to the Christmas holiday and personnel vacation time.

If you have any questions regarding the attached, please contact Mr. C. E. Clark, of DOE-RL, on (509) 376-9333, or Mr. W. J. Bjorklund, of PNL, on (509) 376-4781.

Sincerely,

ERD:CEC



R. D. Izatt
R. D. Izatt, Director
Environmental Restoration Division

T. D. Chikalla
T. D. Chikalla, Director
Facilities and Operations
Pacific Northwest Laboratory

Enclosure

cc: P. J. Day, EPA, w/encl.
T. D. Chikalla, PNL, w/encl.

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DOE-RL/PNL DRAFT TEXT REVISIONS

RESPONSES TO WDOE COMMENTS NOTED IN
NOTICES OF DEFICIENCY DATED APRIL 26, 1990 AND SEPTEMBER 28, 1990
(ROUNDS 1 & 2)

Comment
Number

DOE-RL/PNL Proposed Response

- 9413137.1778
- 1 Add a SEPA checklist to accompany the permit application. The SEPA checklist will follow State format, will be internally (PNL/DOE-RL) approved in a separate process, and formally submitted along with the Part B permit application when it is revised. ✓
 - 2 Revise Foreword, first paragraph, p. iii, to read:

The Hanford Site is Federal property operated by the U.S. Department of Energy-Richland Operations Office (DOE-RL). A portion of the Hanford Site consists of buildings and locations identified as the Pacific Northwest Laboratory (PNL), a multipurpose national laboratory co-operated for DOE-RL by Battelle Memorial Institute, Pacific Northwest Laboratories. The 305-B Storage Unit receives and stores dangerous and radioactive mixed waste (RMW) from various Hanford waste generating units, primarily from Pacific Northwest Laboratory (PNL) operations, until the waste can be transported on or off site for reuse, recycling, treatment, storage, and/or disposal. Storage of these wastes is regulated under the Resource Conservation and Recovery Act of 1976 (RCRA) and the Washington State Hazardous Waste Management Act of 1976 for ~~nonradioactive~~ ^{clarify} dangerous wastes; and by these acts (as to the nonradioactive hazardous constituents) and the Atomic Energy Act of 1954, as amended, (for radioactive constituents) for RMW.
 - 3 Revise Section 1.1, p. 1-1, first paragraph to read:

The 305-B Storage Unit began operating under interim status in March 1989. This unit, classified as container storage, will be permitted under Washington State Department of Ecology (Ecology) Dangerous Waste Regulations, Washington Administrative Code (WAC) 173-303-806 and references therein (Ecology 1989). ✓
 - 4 Revise Section 1.1, p. 1-1, second paragraph, third sentence, to read:

Wastes are characterized in accordance with the guidelines in Chapter 3 to designate the wastes under the Dangerous Waste Regulations. They are then transported to 305-B by truck or light utility vehicle. ?

6

A. See comment 5 for added reference to Section 4.1.1.2.

B. Revise Section 4.1.1.2, p. 4-1, to read:

Management practices and procedures for containers of dangerous waste are in place at the 305-B Storage Unit to assure the safe receipt, handling, preparation for transport, and transportation of wastes. These practices and procedures are summarized below.

Inspection of Containers. A system of daily, weekly, monthly, and yearly inspections is in place to assure container integrity, check for proper storage location, prevent capacity overrun, etc. These inspection procedures are detailed in Section 6.2.

Container Handling. All unit staff are instructed in proper handling safeguards as part of their training (see Section 8.1.2 for further details). For example, employees are instructed to open all high-vapor-pressure liquids in the flammable liquid bulking module to avoid buildup of vapors in the unit.

Containers are always kept closed except when adding or removing waste, in accordance with WAC 173-303-630(5)(a).

Containers are not opened, handled or stored in a manner which would cause the container to leak or rupture. Small containers are stored on ventilated shelving or in approved flammable liquid storage lockers (if appropriate). Containers over five gallons capacity are stored on the floor of the appropriate storage cell, in cabinets, or stored in the appropriate containment area on the high bay floor under Section 4.3.2. Unnecessary handling not required for redistribution or preparation for transport and disposal by either labpacking or bulking (see below) is minimized. Drums are moved manually, by crane or chain hoist, or with an electric forklift. For manual movement, hand trucks specifically designed for drum handling are utilized. Crane and chain hoist operations are performed using a choker chain or drum hoist. When using the forklift, a drum hoist is used or the drums are carried on pallets. Drums are never carried on the forks or "speared" by slipping the forks under the chime.

When waste handling operations are conducted, a minimum of two persons are present in the unit.

Lab Packing. One of the major functions of the 305-B Storage Unit is the preparation of lab packs for offsite recycling, treatment and/or disposal of small quantity lab wastes generated by DOE-RL/PNL activities.

Lab packs are prepared in compliance with WAC 173-303-161, 49 CFR 173.12, other applicable regulations, and permit conditions of the planned receiving facility (recycler, treatment facility, or disposal facility). ~~Permit conditions affecting preparation of lab~~ *check*

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1. *Staphylococcus aureus*

In addition, the unit utilizes a local exhaust system for "bulking" as described in Section 4.1.1.2. This system is located in the flammable liquid bulking module. Local exhaust of 3300 CFM is provided during bulking operations. Another, smaller ventilation system, referred to as the "elephant trunk ventilation system", is located in the high bay storage cell areas for occasional bulking of solids or nonflammable liquids not requiring use of the flammable liquid bulking module. This system has a ventilation capacity of 1550 CFM. These local exhaust systems are detailed in Plates 4-13 and 4-14 of Appendix 4A. A smaller, laboratory-style fume hood is to be installed by February 1991 on the south wall of the high bay for incompatibility testing, pH determination, flash point testing, and other small-volume waste work.

- 9 A. Revise index, Appendix 2A (p. APP 2A-ii), by adding:

Plate 2A-8. 300 Area Topographic Mapping, Drawing H-3-49599, Rev. 0, Sheet 5 of 8

Plate 2A-9. 300 Area Topographic Mapping, Drawing H-3-49599, Rev. 0, Sheet 6 of 8

B. Add new topographic maps of the 300 Area (Drawing H-3-49599, sheets 5&6) to Appendix 2A.

- 10 Revise Section 2.2.1, p. 2-6, first full paragraph to read:

Plates 2-2 through 2-7 in Appendix 2A provide a detailed representation of the Hanford 300 Area where the 305-B Storage Unit is located. These maps provide a detailed profile of the unit and a distance of 1,000 ft around it at a scale noted on the drawings. Contour intervals are shown at every foot, and provide sufficient detail of surface waters and flow, access control, buildings, structures, fire control facilities, etc., to meet the requirements of WAC 173-303-806(4)(a)(xviii) (Ecology 1989).

- 11 Revise Section 2.3.2, p. 2-8, fourth sentence of third paragraph to read:

Figure 2-5 shows those portions of the 300 Area which would be affected by the probable maximum flood.

- 12 A. Revise Section 2.4, p. 2-10, third paragraph, to read:

Wastes from generating units outside of the 300 Area but on the Hanford site are transported over DOE-maintained roads as shown in Figure 2-6. These roads are accessible to the general public only south of the Wye Barricade as shown in the figure. In addition, waste shipments from 305-B to offsite treatment, disposal or recycling facilities are generally shipped over public roads enroute to the consignee.

- B. Add a fourth paragraph to Section 2.4, p. 2-10, to read:

Wastes generated at laboratories within the 300 Area are transported to 305-B principally over roads which are not accessible to the general public. All access to the 300 Area (except the outer parking lot) is controlled by DOE, limited to site personnel holding appropriate clearances, and vehicular traffic is limited to official business. Traffic destined for the 305-B unit goes over roads designed to handle truck traffic. Roads within the 300 Area have speed limits of 15 miles per hour. Traffic in and out of the unit averages 1-5 vehicles per day. Traffic destined for adjacent facilities averages 10-15 vehicles per day and ranges from passenger cars to heavy trucks. All roads within the 300 Area are paved, all-weather roads. There are no traffic signals within the 300 Area.

containers. In other cases, the containers have been opened and the contents partially consumed.

When unopened laboratory chemicals are delivered by generating units in their original factory containers, they are separately inventoried. This inventory is then provided to users of laboratory chemicals throughout PNL and at WHC in an effort to locate other users of the chemical. This inventory is published not less often than monthly. The unopened containers are retained for up to nine months before being consigned for offsite disposal.

Opened containers are also offered to other PNL users for use where use of non-certified reagents is acceptable. Examples of such use would be neutralization of bench acid spills, solvent cleaning of glassware stains, etc. Opened containers are not accumulated for purposes of reuse, however, as unopened reagents are. Potential users must contact 305-B about availability of opened containers.

Liquid laboratory chemicals in small containers which cannot be redistributed onsite are bulked if practicable in accordance with the procedures described in Section 4.1.1.2. This activity serves to reduce the number of containers which are shipped and ultimately disposed of as dangerous waste, since containers which are "empty" as defined in WAC 173-303-160(2) are crushed and disposed of as solid waste rather than being included in the dangerous waste quantity (as occurs with labpacks).

- 14 Add the following second paragraph to Section 2.5.8, p. 2-13 (as revised in Response 13 above), as follows:

Offsite waste management options for dangerous wastes being shipped from the 305-B unit are evaluated according to the following order of preference:

1. Recycling, including solvent reprocessing, oil recycling, metals recovery, burning for energy recovery, etc.
2. Treatment, including incineration, volume and/or toxicity reduction, chemical destruction, etc.
3. Land disposal is viewed as a least favored option and is generally only utilized for treatment residues, spill cleanup residues, or when treatment is not feasible.

When permitted by law and/or contractual obligations, 305-B endeavors to utilize this hierarchy without regard to minor variations in cost, e.g. if recycling is available but slightly more expensive than land disposal, recycling is utilized.

- (15) A. Add the following sentence to the end of the first paragraph of Section 2.5.9, p. 2-13:

See Section 2.5.1 for description of these physical controls.

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The waste is inspected at the generating unit by the waste management organization to verify the information on the request form, such as number, sizes, and types of containers, location of waste, etc., and to check for proper containerization of waste. If discrepancies are noted during the inspection, the waste will not be picked up by the waste management organization. Typical discrepancies include waste not as described on request form or lack of supporting data to verify waste characteristics. In such cases, deficiencies will be explained to the generating unit responsible person, who will then be responsible for correcting them.

If the waste is found to be acceptable for transport, waste management staff will check to assure required labels are in place, and transport (or arrange for transport of) the waste to 305-B. If transport will be over public roads, a Uniform Hazardous Waste Manifest will be prepared identifying PNL as the transporter and 305-B as the receiving TSD unit. A copy of all such manifests is returned to the generating unit within 30 days of receipt at 305-B. A copy of the manifest is also retained at 305-B.

Waste delivered to 305-B by the generating unit or by transporters other than waste management organization staff must follow the foregoing procedures and obtain approval from the waste management organization prior to delivery.

18

Revise Section 2.8.2, p. 2-17, to read:

Waste shipments received at the 305-B unit containing manifest discrepancies are not accepted unless the discrepancy or discrepancies can be resolved with the generating unit at the time the shipment is received. Manifest discrepancies requiring such resolution include:

- Variations exceeding 10% in weight for bulk shipments such as tank trucks or tank cars (generally not applicable to 305-B since most shipments are in drums or other containers);
- Any inaccuracy in piece counts in containerized shipments (underages or overages);
- Type mismatches (i.e., the waste is not as described on the request form, obvious inaccuracies such as waste acid substituted for waste solvent.)

Manifest information will be also be considered incorrect if the written description of wastes does not agree with visual observations, or if observed weights or volumes differ by more than 10 percent from those described on the manifest.

If a discrepancy is noted, the generating unit will be contacted immediately. The waste will not be accepted for storage until the discrepancy is resolved. The generating unit will be asked to identify the source of the discrepancy (e.g. error in estimating volume or weight, incorrect identification of waste, etc.) Once the

of this section (which provides a lesser compliance standard in certain cases) are not applicable to 305-B.

26 No response necessary.

(27) A. Delete the second paragraph, Section 3.2, Notification for Storing of Waste.

B. Retitle Section 3.2, Waste Collection at the Generator Facility, as Waste Collection at the Generating Unit, and revise the second paragraph, p. 3-9, to read:

describe
Labeling and Marking. After inspection of the waste at the generating unit, the approved wastes are assigned a unique computer identification number and hazard classification. The waste containers are then marked and labeled in compliance with WAC 173-303-190(2) and (3), and -630(3) (DOT, "Hazardous Waste", and hazard property warning markings and labels). In addition, each waste container is labeled with a list of constituents and/or an appropriate hazard description. The containers are also labeled with a label indicating compatibility group and cell location, and with a unique computer-generated identification number generated by the tracking system described below. This computerized information helps the waste handlers assure safe handling, storage, retrieval and transportation of dangerous waste.

Transportation. The labeled containers are transported to 305-B by PNL staff. Staff responsible for transporting wastes are trained in applicable DOT requirements and emergency response. Wastes are transported using a truck or van. For transport on public roads, the vehicles are placarded in compliance with DOT regulations and manifested in compliance with WAC 173-303-180, as applicable. *define* *not manifested if only in 305 area?*

28 No revision necessary (addressed in our response to comments 4 and 17)

29 See response to Comment 27.

30 Replace the second sentence of Section 3.2, Waste Handling, Storing, and Tracking at 305-B, second paragraph, p. 3-10, lines 11-12, with the following:

Containers of flammable RMW are stored above grade in an area adjacent to the high bay area. Small containers (five gallons or less capacity) are stored in a flammable storage cabinet. Larger containers, if intact, are stored in individual secondary containment devices, such as drip pans or pallets with secondary containment, adjacent to the cabinet. *not acceptable describe particular requirements*

31 Revise the first paragraph of Section 3.2, Recordkeeping and Inventory Control, p. 3-10, to read:

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Other waste types which may require sampling are sludges, powders, and granules. Nonviscous sludges will be sampled using a COLIWASA. Highly viscous sludges and cohesive solids will be sampled using a trier, as specified in SW-846 (EPA 1986). Dry powders and granules will be sampled using a thief, also as specified in SW-846 (EPA 1986).

Samplers will be constructed of material compatible with the wastes. In general, aqueous liquids will be sampled using polyethylene or glass samplers, organic liquids using glass samplers, and solids using polyethylene or stainless steel samplers. Disposable samplers will be used whenever possible to eliminate the potential for cross-contamination. If nondisposable equipment is used, it will be decontaminated between sampling using the guidelines in the facility sampling procedures.

The number of samples collected will depend on the amount of waste present and on the heterogeneity of the waste as determined by observation. In most cases, there will be only one container of waste present. In such cases, only one vertical composite sample will be collected (e.g., COLIWASA). If more than one container is present, a random number of samples will be collected and analyzed statistically using the procedures specified in Section 9.2 of SW-846 (EPA 1986).

look into this - must be more specific in the text

- 34 Revise the first paragraph of Section 4.1.1.1, p. 4-1, to read:

Most wastes stored at the 305-B Storage Unit are received in their original, as-procured containers. Containers of hazardous materials entering the unit are inspected before being accepted for storage. Generating units are responsible for placing the materials in adequate containers. Repackaged materials must be placed in containers which are new and compatible with the materials to be stored.

Containers in poor condition or inadequate for storage are not accepted at the unit if transport is by non-unit personnel. Such wastes are not accepted for transport by unit personnel (see Section 6.4.1 for inspection prior to transport performed by unit personnel). "Container in poor condition or inadequate for storage" means a container which is not an intact, undamaged packaging which is securely sealed to prevent leakage during storage, transport and ultimate offsite disposal. Examples of acceptable packagings include laboratory reagent bottles, DOT containers, spray cans, sealed ampules, paint cans, leaking containers which have been overpacked, etc. Unit operations personnel have the authority to determine whether a container is in poor condition or inadequate for storage, using the criteria of WAC 173-303-190(1) and professional judgement whether the packaging may leak during handling, storage and/or disposal.

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The floors in the high bay area are also canted toward a separate sump system which is sealed with epoxy and blocked to prevent drainage. Drums stored in this area are also stored on pallets to prevent contact with spilled material in the event of a release. Segregated storage areas for incompatible materials have been set up in the high bay storage area to prevent commingling of spilled wastes during a catastrophic (multi-drum) spill incident. Each area's floor is sloped towards its own containment trench, which is in turn separated from other trenches by epoxy-coated concrete barriers.

The flammable liquids bulking module, along with its purpose of providing a ventilated area for bulking of compatible hydrocarbon wastes, is used as an independent storage cell. Secondary containment is provided by the walls of the module, which have been sealed at the floor joint by use of grout coated with epoxy paint.

For protection of the basement RMW storage area, curbing/diking is provided to prevent migration and drums are stored on pallets to prevent container contact with spilled materials. This area has no drainage.

Flammable RMW is stored within its own secondary containment devices. Small containers of flammable RMW are stored in a storage cabinet as noted in Section 4.3.1. Larger containers are stored in individual secondary containment devices (such as drip pans) to prevent runoff or mingling of spilled contents.

41

A. Revise Section 4.1.1.6, p. 4-2, to read:

Secondary containment is provided for all dangerous wastes stored at the 305-B unit. All floors in the high bay area are sloped toward sumps which have no drains and are covered with grating to prevent safety hazards. In addition, all floors, sumps, curbs and ramps in the high bay area are coated with an epoxy based coating as described in Section 4.1.1.4. Inspection of the containment to maintain integrity is described in Section 6.2. Individual secondary containment systems are configured as follows:

4.1.1.6.1 Acids and Oxidizers Cell. The acids and oxidizers cell is located at the northwest corner of the 305-B unit high bay floor. The cell is constructed of epoxy-painted concrete block walls 4' high and incorporates a 1' deep sump at the west end of the cell. Four cabinets, open shelving, and a large-container storage area are provided within the cell to store containers of recyclable materials and dangerous wastes. The secondary containment volume of the individual sump for this cell is 67 gallons, and the total containment volume of the cell is 774 gallons. Storage capacity of the cell is limited by the UBC to not more than 500 gallons of liquid (inorganic or noncombustible organic) acids, 6000 cubic feet of oxidizing gases, and not more than 1261 pounds of liquid and

4. Where these materials are stored in the FM storage cabinets or in safety cans, these limits may be increased another 50%.)

- Class 1A flammable liquids: 60 gallons
- Class 1B flammable liquids: 120 gallons
- Class 1C flammable liquids: 180 gallons
- Maximum Class 1A, 1B, and 1C at any one time: 240 gallons
- Class 2 combustible liquids: 240 gallons
- Class 3 combustible liquids: 500 gallons
- Flammable fibers, loose: 100 cubic feet
- Flammable fibers, baled: 1000 cubic feet
- Flammable gases in any one cylinder: 3000 cubic feet
- Liquefied flammable gases: 30 gallons

To maintain required aisle spaces and functional usability, the liquid capacity of the hydrocarbon cell is set at 1000 gallons.

4.1.1.6.5 Flammable Liquids Bulking Module. The flammable liquids bulking module, along with its purpose of providing a ventilated area for bulking of compatible hydrocarbon wastes, is used as an independent storage cell. Secondary containment is provided by the walls of the module, which have been sealed at the floor joint by use of grout coated with epoxy paint.

Nontransient storage of flammable liquids in the module is limited to 55 gallons. The module is also utilized for storage of small (typically lecture bottle size) nonflammable gas cylinders. Gases stored may be highly toxic, reactive, etc. (Flammable gases are stored in the hydrocarbon cell, as described above.) A diagram of the module is provided in Figure 4-6.

4.1.1.6.6 Ignitable Waste Drum Storage Area. A section of the east portion of the high bay has been dedicated to storage of drum quantities of ignitable waste prior to offsite shipment. The area is bordered on the north and south sides by angle iron ($3\frac{1}{2}$ "x6") bolted to the floor (see Plate 2, Appendix 4A for detail) and sealed to provide secondary containment. The area is approximately 15'x7'. To further enhance containment and to allow greater storage capacity, the drums stored in this area will be stored in flammable liquid drum storage cabinets.

Sump containment capacity of this area is approximately 224 gallons and total containment capacity is approximately 431 gallons. Maximum storage in this area is 390 gallons (six 55 gallon drums and 12 five-gallon drums), subject to the overall UBC limitations noted in Section 4.1.1.6.4.

Drum quantities of flammable/combustible materials are also stored outside of the storage cells along their east walls. Two large and three small drum storage cabinets are utilized for this storage, with a total capacity of 455 gallons (seven 55-gallon drums and 14 5-gallon drums), subject again to the overall UBC limitations noted

offsite shipment to licensed treatment, disposal, or recycling facilities. Generally, only toxic organic solvent mixtures (typically halogenated solvents), antifreeze mixtures, contaminated water which is toxic DW, nonliquid wastes, other ORMs, state-only dangerous waste, and non-regulated materials are stored in the central high bay floor storage area.

If wastes incompatible with the foregoing are stored in the high bay storage area, they are kept separated by at least ten feet of distance and stored in individual drip pans for segregation in case of simultaneous accidental spillage. Compatibility of the materials is determined prior to acceptance in accordance with Section 3.2. The secondary containment volume of the sumps in the high bay storage area, exclusive of the sumps within individual areas described above, is 565 gallons. Maximum storage in the high bay storage area is thus approximately 5650 gallons (102 drums). The high bay storage is also governed by the building occupancy maximums of Table 4-1, which includes the inventory of the individual storage cells described above. In order to provide additional separation from spilled liquids and for ease of handling, all drums stored on the high bay floor are stored on pallets. A diagram of this cell is provided in Figure 4-8.

4.1.1.6.10 Flammable RMW Storage Area. Due to UBC restrictions, flammable radioactive mixed waste cannot be stored in the basement of 305-B with the other radioactive mixed waste. The flammable RMW received by 305-B for storage prior to disposal is stored in a separate area above grade in the east portion of the building. A FM-approved flammable liquids storage locker, appropriately marked with radiation warning signs, is used for storage and secondary containment of small (5 gallons or less capacity) of flammable RMW. Larger containers are placed in individual secondary containment devices in order to contain spills from leakage and maintain waste segregation.

Flammable RMW storage is limited to 200 gallons total including that stored in the cabinet. Cabinet configuration and storage is described in Section 4.3.1. A diagram of this cell is provided in Figure 4-9.

4.1.1.6.11 RMW Storage Area. Radioactive mixed waste which is not flammable per UBC (i.e. flash point above 100°F) is stored in a special area in the basement of 305-B. This area has a 3" high curb to provide secondary containment, sealed with epoxy paint. Drums stored in this area are stored on pallets to prevent potential contact with spilled waste in containment during an emergency.

The secondary containment volume of this area is 1246 gallons. In normal use, the storage capacity of this area is limited by the radionuclide limits imposed by the Department of Energy for so-called "low inventory facilities". These limitations are shown in Table 4-2. A diagram of this cell is provided in Figure 4-10.

- 46 A. Revise Section 4.3.2, p. 4-4, to read:

Section 6.5.2 describes procedures that are used at 305-B to determine the compatibility of dangerous wastes so that incompatible wastes are not stored together. Wastes stored in 305-B are separated by compatibility, chemical makeup and hazard class and stored in areas having appropriate segregated secondary containment, as described in Section 4.1.1.6.

As shown in Figures 4-2 through 4-10, each storage area has individual storage configurations and secondary containment structures are provided to assure that incompatible materials will not commingle if spilled. Further segregation is provided by chemical storage cabinets located throughout the facility in various areas as shown in Figures 4-2 through 4-10. Cabinet types are noted in those figures and capacities described in Table 4-3.

Incompatible wastes are never placed in the same container, or in unwashed containers that previously held incompatible waste. Compliance with WAC 173-303-395(1)(b) is assured utilizing the reactivity groupings given in A Method for Determining the Compatibility of Hazardous Waste (EPA 1980). Use of this system is described in "Procedures for Hazardous Waste and Radioactive Mixed Waste Management and Disposal at Pacific Northwest Laboratory". This internal procedure is part of the 305-B operating record, as required by WAC 173-303-395(1)(c).

- B. Add Table 4-3 describing the size and storage capacity of the various shelves and cabinets used throughout 305-B.

- 47 Add a second paragraph to Section 5.0, p. 5-1, to read:

Groundwater monitoring may be required at the 305-B unit if applicable regulations change, the scope of operations at the unit changes, or if required under a WDOE/EPA corrective action order.

- 48 A. Revise the third paragraph of Section 6.1, p. 6-1, third sentence, to read:

All doors to 305-B are kept locked at all times except when in use.

- B. Add a new paragraph between the third and fourth paragraphs of Section 6.1, p. 6-1, to read:

Keys to the unit are issued only to unit personnel, security personnel, and emergency response personnel. One custodian, who only enters the office areas, is also issued a key and is instructed not to enter waste storage areas. Any additions to this list are approved by the unit operating supervisor, the line manager, and the building manager and noted in the operating record of the unit.

Results of this daily inspection are recorded in the daily operating logbook, which is part of the permanent 305-B operating record.

B. Revise Section 6.2.2.1, p. 6-8, to read:

Whenever waste operations take place, daily inspections of dangerous and RMW containers stored at 305-B are performed. Inspection for leakage, evidence of damage or deterioration, proper and legible labeling, and proper lid and bung closure is made. The containment system is also checked on a daily basis for accumulation of any wastes which may have been spilled into them. Structural integrity of the containment systems is checked on a weekly basis.

Daily and weekly inspections are performed and documented in accordance with Section 6.2.1.1. Specific inspection items are enumerated in Section 6.2.1.1 in association with the inspection description and frequency. Response to problems and documentation of corrective actions are as described in Section 6.2.1.1.

54 Revise Section 6.3.1.1, p. 6-9, second paragraph to read:

Because of the nature of activities which occur in the 300 Area, the potential exists for emergencies outside of 305-B (e.g., release of radioactive materials) which could impact operations and staff in 305-B. For this reason, the general emergency signals for the 300 Area are applicable to 305-B. These signals are summarized in Table 6-1. Fire alarm signals are located in each building throughout the 300 Area. The nearest emergency siren for "area evacuation" and "take cover" is located 300 yards southeast of 305-B, on top of the 326 Building, and is audible in all parts of 305-B. Because fissile materials are not handled in 305-B, there is no criticality alarm for the unit.

55 Revise Table 6-1., p. 6-10, second row, second column to read "Evacuation" instead of "Excavation."

(56) See response to comment 41.

57 A. Revise Section 6.3.2, p. 6-13, to read:

Containers stored in the 305-B unit are placed to provide aisle space clearance in accordance with WAC 173-303-340(3) and applicable standards of the Uniform Building Code and Life Safety Code.

The proper maintenance of aisle space is inspected weekly and noted on the weekly inspection checklist (Figure 6-2).

B. Delete Figure 6-5, p. 6-18. (This information is now given in new Figures 4-2 through 4-10).

58 See responses to comments 41 and 51.

69 See response to comment 71.

70 See response to comment 71.

71 Replace Section 7 with new Section 7, Contingency Plan, to read:

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7.0 CONTINGENCY PLAN [G]

The information contained in this chapter is 305-B's "Facility Contingency Plan" as required under WAC 173-303-806(4)(a)(vii). This chapter is also the Building Emergency Plan (BEP) as required under the DOE-RL Site Emergency Plan (revised 4/90) and PNL procedure PNL-MA-11. It supersedes all previous contingency plans and BEPs. It is to be maintained in the locations shown in Section 7.9 of this plan.

A building emergency plan (BEP) is required under the DOE-RL Emergency Plan for each building on the Hanford Site. This Contingency Plan has been designed to meet the requirements for a BEP as well as the Ecology requirements for a contingency plan for the 305-B unit. The Site Emergency Plan details the membership of the Emergency Action Coordinating Team (EACT) mentioned in Section 7.3 and following sections, and the procedure for notifying and mobilizing the team. The site contingency plan and PNL-MA-11 should also be consulted for reference.

This plan provides for the safety of employees, other contractor personnel, visitors, and members of the general public in the event of an emergency. It also is designed to minimize hazards resulting from fires, explosions, or any other unplanned sudden or non-sudden release of dangerous waste or dangerous waste constituents to air, soil, or water. The provisions of this plan will be carried out immediately whenever there is a fire, explosion, or release of dangerous waste or dangerous waste constituents which could threaten human health or the environment.

DOE-RL or PNL shall review and immediately amend, if necessary, this plan whenever:

- Applicable regulations or the facility or unit permit are revised;
- The plan fails in an emergency;
- The unit changes (in its design, construction, operation, maintenance, or other circumstances) in a way that materially increases the potential for fires, explosions, or releases of dangerous waste or dangerous waste constituents, or in a way that changes the response necessary in an emergency;
- The list of emergency coordinators changes; or
- The list of emergency equipment changes.

Amendments to the plan, if necessary following review, will be made in accordance with Section 1.5 of the 305-B Part B permit application.

7.4 EMERGENCY RESPONSE PROCEDURES [G-4]

Emergency response procedures have been established for the 305-B Storage Unit and are described below.

7.4.1 Notification [G-4a]

Discoverer

1. If within the unit, notify unit personnel of discovery of spill or release.
2. Immediately notify the PNL Single Point Contact (375-2400) and provide all known information, including:
 - Name(s) of chemical(s) involved and amount(s) spilled, on fire, or otherwise involved, or threatened by, the incident.
 - Name and callback phone number of person reporting the incident.
 - Location of spill or discharge (pinpoint as closely as possible).
 - Time incident began or was discovered.
 - Where the materials involved are going or may go, such as into secondary containment, under doors, through air ducts, etc.
 - Source and cause, if known, of spill or discharge.
 - Name(s) of anyone contaminated or injured in connection with the incident.
 - Any corrective actions in progress.
 - Anyone else who the caller has contacted.

NOTE: DOE-RL and other (non-PNL) contractor personnel are trained to notify Hanford Emergency number (811 from onsite telephones) rather than the Single Point Contact. Hanford Patrol, who operates the 811 number, then notifies the Single Point Contact.

Single-Point Contact

1. The single-point contact will notify the BED, or one of his alternates if the BED cannot be immediately reached, to arrange immediate response to the incident.
2. The single-point contact will arrange for immediate response from Hanford Fire Department for fire or ambulance services as needed based on the report of the discoverer.
3. The single point contact will notify the Laboratory Safety Department of the spill or release incident.
4. The single point contact will support the BED in providing further notification and coordination of response activities if needed. Potential activities requiring single-point contact participation are as follows:

7.4.2 Identification of Hazardous/Dangerous Materials [G-4b]

The BED will immediately identify the character, exact source, amount, and extent of the chemical(s) involved in the incident to the extent possible. Identification of hazards may be made by visual inspection of involved containers, by sampling, by reference to unit inventory records or shipping manifests, or by consulting with unit operations personnel. The unit operating record includes information on the characteristics and storage location of all wastes stored in the unit. This information is referenced to container identification numbers and can be used to identify containers involved in the emergency. Samples of materials involved in an emergency can be analyzed by PNL, HEHF, or other analytical laboratories as appropriate.

7.4.3 Hazard Assessment [G-4c]

Once the materials involved in the incident have been identified by the procedure above, it should be possible to determine the extent of the danger posed by the incident. The BED should assess both direct and indirect hazards posed by the incident. The ECC is available to assist the BED if needed. Possible aid may be in the form of determining the extent of an emergency, identifying the hazards associated with the materials involved in the incident, assisting in response to the incident, or coordinating the mobilization of special equipment or supplies to the incident site.

If assessment of all available information does not yield a positive assessment of the danger posed by the incident, a worst case condition will be presumed and evacuation procedures will be initiated. The BED present on scene is responsible to initiate any evacuation through the steps shown in Section 7.4.1 above.

7.4.4 Control Procedures [G-4d]

The initial response to any emergency will be to immediately protect the health and safety of persons in the immediate area. Identification, containment, treatment, and disposal assessment will be the secondary response.

The following is presented to define specific emergency actions for personnel assigned to 305-B for different types of emergencies which could be encountered during normal operations.

7.4.4.1 Area-Wide Evacuation. (Signal: Steady siren of 3-5 minutes' duration.) In the event of an area-wide evacuation, 305-B personnel will shut down equipment, secure wastes (especially RMW), and, if applicable, secure classified documents (or carry them with them), if time permits. They will report to the south parking lot accountability area. The zone warden will account for all unit personnel.

7.4.4.2 Take Cover. (Signal: Wavering siren) In the event a take cover alarm is sounded, 305-B personnel will stay inside the 305-B unit, close all exterior doors, and turn off all intake ventilation. They will secure all

- Where the materials involved are going or may go, such as into secondary containment, under doors, through air ducts, etc.
- Source and cause, if known, of spill or discharge.
- Name(s) of anyone contaminated or injured in connection with the incident.
- Any corrective actions in progress.
- Anyone else who the caller has contacted.

3. Take action to contain and/or stop the spill if all of the following are true:

- The identity of the substance(s) involved is known;
- Appropriate protective equipment and control/cleanup supplies are immediately available;
- The employee can perform the action(s) contemplated without assistance, or assistance is immediately available from other trained unit employees; and
- Time is of the essence, i.e. the spill/discharge will get worse if immediate action is not taken.

If any of the above conditions are not met, or there is doubt, the employee should evacuate the area and remain outside the unit and upwind from it pending the arrival of the BED. He/she should remain available for consultation with the BED, Hanford Fire Department, or other emergency response personnel.

Single-Point Contact

1. The single-point contact will notify the BED, or one of his alternates if the BED cannot be immediately reached, to arrange immediate response to the incident.
2. The single-point contact will remain available to the BED to support further notification and response activities if needed. Potential activities requiring single-point contact participation are shown in Section 7.4.1 and in the DOE-RL Site Emergency Plan.

Building Emergency Director (BED)

1. Proceed directly to the unit to coordinate further activity. Take command of the scene from discovering unit employee.
2. Obtain all immediately available information pertaining to the incident. Determine need for assistance from agencies listed in Section 7.6 and arrange for their mobilization and response through the Single Point Contact.
3. If building evacuation is necessary, sound the fire alarm.
4. Arrange for care of any injured employees.

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1. Upon the actuation of the fire alarm, personnel will shut down equipment, secure wastes (especially RMW), lock up classified documents (or carry them with them), ONLY if time permits.
 2. The alarm automatically signals both the 300 Area Hanford Fire Department station and the 300 Area Hanford Patrol Headquarters. Both will respond immediately.
 3. Personnel shall leave the unit by the nearest safe exit and proceed to the designated staging area (south parking lot) for accounting by the zone warden.
 4. The Single Point Contact shall be immediately notified, who shall in turn notify the BED.
 5. The BED will proceed directly to the scene.
 6. The BED will obtain all necessary information pertaining to the incident.
 7. The BED will contact the Single Point Contact and advise whether to notify the PNL Occurrence Representative or the 300 Area Emergency Director (AED), depending on the severity of the event. Inform as to the extent of the emergency (including estimates of dangerous waste or RMW released to the environment) and any actions necessary to protect nearby facilities.
 8. Activation of the 300 Area ECC sets into motion the notification process for DOE, other Hanford contractors, and outside agencies.
 9. The Hanford Patrol will set up roadblocks within the area to route traffic away from the emergency scene.
 10. Emergency medical technicians will remove any injured personnel to a safe location, apply first aid, and prepare for transport to the medical department (DOE/HEHF) or to hospitals. Medical personnel are on standby at the medical facility 24 hours/day.
 11. The Hanford Fire Department is responsible for fighting and extinguishing the fire.
 12. All emergency equipment will be cleaned and restored for its intended use immediately after completion of cleanup procedures.

7.4.4.6 Unusual, Irritating, or Strong Odors. (Signal: None) If an unusual, irritating or strong odor is detected, and the person detecting it has reason to believe that the odor may be the result of an uncontrolled release of a toxic or dangerous material, they shall:

- Immediately activate the building fire alarm system to evacuate the building; and

the need for, and extent of, any such monitoring, in consultation with an industrial hygienist if appropriate.

In the event of power loss to site equipment which results in failure of the equipment, the Building Manager is to be contacted to arrange for repair of the affected equipment and/or provide restoration of power. The BED should be contacted in the event that any failure results in a release or potential release to the environment as described in Section 7.3.

7.4.4.10 Damaged, Unacceptable Shipments. (Signal: None) When a damaged shipment of hazardous material or dangerous waste arrives at the unit, the shipment is unacceptable for receipt under the criteria of Section 2.8.3 of this permit application. The damaged shipment should not be moved. Unit personnel should instead perform the following steps:

1. If the release from damaged packagings is a "minor spill" under the criteria of Section 7.4.4.3:
 - Immediately notify the PNL Single Point Contact (375-2400) to advise of the situation. The Single Point Contact will notify the BED, who will respond and assist in the evaluation of, and response to, the incident.
 - Notify the generator of the damaged shipment, and obtain any chemical information necessary to assist the response.
 - Unit personnel may proceed with remedial action, including overpacking of damaged containers, cleanup of spilled material, or other necessary actions to contain the spill.
2. If the release does not meet the criteria of a "minor spill" as noted above, or the extent of the spill cannot be immediately determined, the unit contingency plan will be implemented as described in Section 7.3.

Reporting of the spill shall take place as detailed in Procedure R1-5, HAZMAT Spill/Release Reporting, which is included in Appendix 7A.

7.4.5 Prevention of Recurrence or Spread of Fires, Explosions, or Releases [G-4e]

The BED is responsible for taking the steps necessary to ensure that a secondary release, fire, or explosion does not occur after the initial incident. Procedures which will be implemented may include:

- Inspection of containment for leaks, cracks, or other damage
- Inspection for toxic vapor generation
- Isolation of residual waste materials and debris
- Reactivation of unit operations in affected areas only after cleanup of residual waste materials is achieved.

- Followup sampling of decontaminated surfaces to determine adequacy of cleanup techniques as appropriate.

7.4.7 Incompatible Waste [G-4g]

After an emergency, the BED or the recovery organization will ensure that no waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed. Wastes from cleanup activities will be analyzed and stored in the same manner as wastes received from outside the unit, i.e. in the manner prescribed in Chapter 4 of the Part B permit application. Field check for compatibility prior to first storage, if necessary, will be performed as described in A Method for Determining the Compatibility of Hazardous Waste (EPA 1980). Incompatible wastes will not be placed in the same container. Containers of waste will be placed in storage areas appropriate for their compatibility class.

7.4.8 Post-Emergency Equipment Maintenance [G-4h]

All equipment utilized during the incident will be decontaminated (if practicable) or disposed of as spill debris. Decontaminated equipment will be checked for proper operation prior to storage for subsequent use. Consumables and disposed materials will be restocked in the quantities shown in the inventories of Section 7.5. Fire extinguishers will be recharged or replaced.

The BED is responsible to ensure that all equipment is cleaned and fit for its intended use prior to the resumption of operations. Depleted stocks of neutralizing and absorbent materials will be replenished, SCBAs cleaned and refilled, protective clothing cleaned or disposed and restocked, etc. Notification of state and local authorities will be made through DOE-RL of completion of cleanup, decontamination and emergency equipment resupply activities. Upon notification and approval of PNL line management, normal unit operations may be resumed.

7.4.9 Response to Container Spills or Leaks [G-4i]

In addition to the foregoing contingency plan provisions, the following specific actions may be taken for leaks or spills from containers at the unit:

- Container leaks will be stopped as soon as possible through tightening closures, tipping the container to stop the leak, use of plugging or patching materials, or overpacking. Appropriate protective equipment will be utilized.
- If it is inadvisable to approach the container, build a containment of sorbent materials and restrict access pending notification of the BED and implementation of the contingency plan.
- Contents of leaking containers may be transferred to appropriate nonleaking containers. Transfer procedures for fire safety will be followed for ignitable or reactive wastes (e.g., use of nonsparking tools, bonding and grounding of containers, isolation of ignition sources, and use of explosion-proof electrical equipment).

7.5.2 Fire Control Equipment

The 305-B unit is constructed of noncombustible materials and equipped with an automatic fire-suppression (sprinkler) system. A portable fire extinguisher is located in each working area in compliance with NFPA safety codes. Each Class ABC extinguisher is capable of suppressing fires involving ordinary combustible materials, flammable liquids, oils, paints, flammable gases, and fires involving electrical equipment. Each Halon extinguisher is capable of extinguishing Class D (reactive metals) fires along with Class ABC fires. All extinguishers comply with the National Fire Code standards for portable extinguishers and are inspected monthly by the building manager. The inspections are recorded on tags attached to each extinguisher.

7.5.3 Personal Protective Equipment

The unit has a safety shower and eyewash facility at each end of the high bay. Drainage from these units flows into the containment trenches. In addition to these units, a portable eyewash unit is maintained at the protective equipment storage area just outside the high bay adjacent to the office area. These eyewash/shower units are inspected weekly in accordance with Section 6.2 of the Part B permit application.

Protective clothing and respiratory protective equipment are maintained at the facility for use during both routine and emergency operations. This equipment is stored in cabinets outside the east entrance to the high bay and includes at least the following:

- 50 disposable splash aprons
- 6 pairs rubber boots
- 100 pairs disposable gloves
- 10 pairs reusable gloves
- 12 chemical resistant suits
- 20 protective glasses
- 5 pair chemical goggles
- 6 face shields
- 4 full face respirators
- Respirator cartridges (variety)
- 3 self contained breathing apparatus (30 minute type)

7.5.4 Spill Control and Containment Supplies

Supplies of absorbent pillows are located in the operating area near the east entrance. These pillows absorb organic or inorganic materials and have a rated absorption capacity of one liter of liquid wastes each. They may be used for barriers to contain liquid spills as well as for absorbent purposes. The work area also has an ample supply of diatomaceous earth for absorption of liquid waste spills. Neutralizing absorbent is available for response to acid or caustic spills. A formaldehyde spill kit is kept in the ORMs/Poisons cell where formaldehyde (an ORM-A) is normally stored. This kit polymerizes and solidifies formaldehyde spills up to 2 gallons in size. A supply of empty drums (DOT 17E tight head and DOT 17H open head) and salvage drums (overpacks)

7.6.2 Hanford Fire Department Mutual Aid

The Hanford Fire Department provides fire response services for the Hanford Site. Mutual aid agreements have been established with Richland, Kennewick and Pasco Fire Departments; with Benton County Fire Districts 1, 2, and 4; Franklin County Fire District 3; and Walla Walla Fire District 5 for support. In events where fire and/or toxic smoke threatens more than one building, the 300 Area ECC is activated.

7.6.3 Medical and First Aid

Professional medical help is provided by DOE-RL onsite through HEHF. Doctors and/or nurses are available for emergency assistance at all times. These personnel are trained in procedures to assist persons contaminated with hazardous and/or radioactive material. Emergency call lists are maintained to provide professional medical consultation at all times. A nurse is on duty in the 300 Area Medical Aid station at all times.

Referral to offsite hospital facilities is made by the HEHF physician providing emergency assistance by phone or in person. The primary hospital utilized in emergencies is Kadlec Hospital, Richland. Kennewick General Hospital, Kennewick, and Our Lady of Lourdes Hospital, Pasco, are utilized as backup facilities. MOAs between these hospitals and DOE-RL dated February 24, 1989 are in place and incorporated in the DOE-RL Site Emergency Plan.

7.6.4 Ambulance Service

Ambulance service is provided by the Hanford Fire Department utilizing qualified emergency medical technicians as attendants. This service is available to the 305-B unit from the 300 Area Fire Station on a 24-hour, 7-day basis. Additional ambulance service is available from other site fire stations and from other local fire departments through the mutual aid agreements noted in Section 7.6.2. An MOA has also been specifically established between DOE-RL and the City of Richland to provide backup ambulance services.

7.6.5 Unified Dose Assessment Center

The Unified Dose Assessment Center (UDAC) is the technical extension of the DOE-RL EACT, providing services to both the EACT and the ECC. The primary mission of the UDAC is to provide recommendations for protective actions, dose calculations and projections, and consultation in the area of industrial hygiene (for hazardous materials), biology, environmental monitoring, and meteorology to support the EACT and the ECC.

Industrial hygiene and biological consultants at the UDAC advise and assist in determining proper response procedures for spills or releases of toxic, flammable, carcinogenic, and pathogenic materials. UDAC staff are responsible to provide a central unified assessment of the dispersion and impact of environmental releases from the Hanford Site. In communication with the ECC, UDAC coordinates the assessment of impacts and assists in determination of actual and potential release scenarios.

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EMERGENCY SIGNALS

Signal	Meaning	Response
Gong (2 gongs/sec)	Fire	Evacuate building. Move upwind. Keep clear of emergency vehicles.
Siren (steady blast)	Area Evacuation	Proceed promptly to south parking lot accountability area. Follow instructions.
Wavering Siren	Take Cover	Close all exterior doors, turn off all intake ventilation and notify WM&EC of your whereabouts. Request call back for status and monitor portable radios.
Howler (Aa-oo-gah)	Criticality	Follow "take cover" instructions above. (No criticality will take place in 305-B since fissile materials are not accepted for storage.)

To hear these signals and a description of actions to take, call 373-2345.

7.8 REQUIRED REPORTS [G-8]

Three types of written post-incident reports are required for incidents at the 305-B unit. They are summarized below.

7.8.1 Report to Ecology/EPA

Within 10 days of the incident, the BED must submit a written report to DOE-RL for forwarding to Ecology concerning the incident. The report must include:

- Name, address, and telephone number of DOE-RL contact;
- Name, address, and telephone number of 305-B unit;
- Date, time, and type of incident (e.g. fire, explosion);
- Name and quantity of material(s) involved;
- The extent of any injuries;
- Assessment of any actual or potential hazards to human health or the environment caused by the incident;

The BED is responsible for investigating each event in his/her area(s) of responsibility and submitting the appropriate report.

7.9 CONTINGENCY PLAN LOCATIONS

Copies of this contingency plan are maintained at the following locations:

- 305-B Unit
- Hanford Fire Department (300 Area Fire Station)
- 300 Area ECC Offices
- DOE/EACT command post, Federal Building, Richland.

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72 See response to comment 71.

73 No response required.

74 See response to comment 71.

75 Revise the fourth paragraph of Section 10.4, p. 10-2, lines 26-32, to read:

Dangerous waste releases occurring within the 305-B unit are responded to and cleaned up as soon as possible in order to minimize the amount of cleanup-generated wastes. Releases are cleaned up in accordance with the procedures found in Section 4.1.1.8 and/or the 305-B contingency plan (Chapter 7.0).

76 Revise the last paragraph of Section 10.4 to read as follows:

Site personnel are instructed not to dispose non-dangerous wastes (office trash, beverage containers, etc.) in dangerous waste containers. Dangerous waste containers are kept closed except when adding or removing waste, which helps prevent inadvertent addition of ordinary refuse.

77 Revise Section 11.0, p. 11-1, first sentence, to read:

This chapter is submitted in accordance with the requirements of WAC 173-303-806(4)(a)(xiii) to demonstrate that DOE-RL has developed a plan to assure safe closure of the 305-B unit.

78 A. Revise Section 11.1.6, p. 11-9, to read:

Closure of 305-B is not expected to begin during the term of the Part B permit. When closure begins, the inventory of dangerous and radioactive mixed waste will be removed within 90 days from receipt of the final volume of wastes. All closure activities will be completed within 180 days of receipt of the final volume of waste. The Director of the Washington Department of Ecology will be notified by DOE-RL at least 45 days before the final closure activities are begun. Closure activities are summarized in Table 11-2. A detailed schedule of closure activities is provided in Figure 11-1.

B. Add a new Table 11-2, Summary of Closure Activities, to Chapter 11.

79 A. Revise Section 11.1.1, p. 11-1, third paragraph, to read:

If there is any evidence of spills or leaks from the unit into the environment, samples will be taken and analyzed to determine the extent of contamination in the soil, and if necessary, in groundwater. Evidence of spills or leaks will be obtained through sampling of unit structures accessible to the environment (e.g.,

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A. Revise Section 11.1.4.2, p. 11-4, first paragraph, to read:

11.1.4.2 Decontamination of Building Equipment and Structures. All equipment and structures in dangerous/mixed waste handling and storage areas will be decontaminated at the time of closure. Equipment and structures to be decontaminated include:

- Floors and walls of the four dangerous waste storage cells
- Floors, walls, and ceiling of high bay and flammable liquid bulking module areas
- Floors and walls of remainder of first floor except for offices, work area, and lavatories/change rooms
- Floors, walls, and ceiling of basement except equipment storage room
- Interior surfaces of all secondary containment trenches
- Fork lift and loading hoist.
- Asphalt ramp outside north high bay door.

B. Consistent with the above list, revise Section 11.1.4.2.1, p. 11-4, title and first sentence, to read:

11.1.4.2.1 Decontamination of Basement. Once the RMW room has been completely emptied of stored waste, wipe samples will be collected at various points along the floors, walls, and ceiling of the basement.

C. Consistent with the above list, revise Section 11.1.4.2.4, p. 11-6, to read:

11.1.4.2.4 Decontamination of High Bay, Flammable Liquid Bulking Module and Other First Floor Areas. Wipe samples will be collected at various points along the floors, walls, and ceiling of the entire first floor, except for the office, supply/office area, lunch room, rest room, and research area. The wipe samples will be analyzed to determine if these areas have been contaminated with dangerous waste constituents. Once the results from the testing are known, a decision can be made as to the appropriate decontamination procedures.

If no contamination is found on the wipe samples, decontamination procedures will consist of dusting, vacuuming, and wiping. Vacuuming is performed using a commercial or industrial vacuum equipped with a HEPA filter. The vacuum cleaner bag containing captured particulates is disposed of as a dangerous waste.

Following completion of decontamination, sampling will be performed, as described in Section 11.1.4.4, to verify that decontamination is complete.

B. Add the above paragraph to the end of Section 11.1.4.2.2.

C. Add the above paragraph to the end of Section 11.1.4.2.3.

D. Add the above paragraph to the end of Section 11.1.4.2.4.

E. Add the above paragraph to the end of Section 11.1.4.2.5.

F. Revise Section 11.1.4.4, p. 11-8, to read:

11.1.4.4 Methods For Sampling And Testing To Demonstrate Success Of Decontamination. A series of wipe samples will be collected at various points along floors, walls, ceilings, and equipment of areas at which decontamination activities were conducted. These samples will be analyzed and used to verify whether decontamination procedures were effective. To verify decontamination, a systematic sampling approach designed to identify the presence of "hot spots" will be employed. Samples will be collected on a regular grid with a spacing of 5 ft. This spacing provides an 80% probability of detecting a circular "hot spot" having a radius of 2.5 ft or larger (Gilbert 1987, pp. 119-125). If any "hot spots" are detected, additional decontamination will be performed.

Decontaminated surfaces will be sampled by collecting wipe samples at each grid point. At each sample location, two samples will be collected within adjacent 1 ft square templates. One sample will be collected using a gauze pad wetted with dilute nitric acid for extraction of inorganic contaminants. The other sample will be collected with a gauze pad wetted with hexane for extraction of organic contaminants. The procedure for collecting wipe samples is given in Appendix 11A.

84 No response required.

85 Revise Section 11.1.4.3, pp. 11-7 and 11-8, first two paragraphs, to read:

11.1.4.3 Management of Decontamination Wastes. Liquid decontamination wastes will be placed in drums and sampled to determine disposal requirements. Grab samples will be collected from drums using COLIWASA samplers as described in Appendix 3A. In order to properly designate the decontamination wastes under WAC 173-303-070, grab samples from each drum will be analyzed for the following:

- Corrosivity using the methods described in Chemical Testing Methods for Complying with the Dangerous Waste Regulation (Ecology 1983), Appendix B, Attachments 1 (pH) and 2 (steel corrosion rate)

operator and this section is therefore not applicable to the 305-B Storage Unit.

C. Revise Section 11.9, p. 11-13, to read:

In accordance with 40 CFR 264.140(c) and WAC 173-303, this section is not required for federal facilities. The Hanford Site is a federally owned facility for which the federal government is an operator and this section is therefore not applicable to the 305-B Storage Unit.

89 Replace Table 12-1 with the attached revised table.

90 See response to Number 18.

91 A. Add a new Section 2.8.4, Unmanifested Waste, to read:

Waste generated within the 300 Area of the Hanford Site and not transported over public roads is not subject to manifest requirements under WAC 173-303. Such waste may be received at the 305-B unit without a manifest.

Where transport is over public roads, a manifest will be utilized as noted in Section 2.8.1. Shipments requiring a manifest and not having one will either be rejected or, at the sole discretion of the unit operator, the unit will accept the waste and file an unmanifested waste report as described in WAC 173-303-390(1) and detailed in Section 12.4.1.1.2.

B. Revise Section 12.4.1.1.2, p. 12-6, to read:

The 305-B Storage Unit receives only dangerous and mixed wastes generated by Hanford Site programs. As noted in Section 2.8.4, unmanifested waste which requires a manifest may either be rejected, or an unmanifested waste report will be filed with Ecology within 15 days of receipt of shipment utilizing Ecology Form 6, Unmanifested Dangerous Waste Report.

The report shall include at least the following information:

1. The EPA/State identification number, name, and address of the facility;
2. The date the unit received the waste;
3. The EPA/State identification number, name, and address of the generator and transporter, if available;
4. A description and the quantity of each unmanifested dangerous waste the unit received;
5. The method of management for each dangerous waste;

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- C. Renumber the existing sections dealing with the above acts in order; Section 13.1 becomes Section 13.3; 13.2 becomes 13.4; 13.3 becomes 13.5; 13.4 becomes 13.6; and 13.5 becomes 13.7.

- D. Add a new Section 13.1, p. 13-1, as follows:

13.1 CLEAN AIR ACT

Since the 305-B unit is an existing unit within an existing facility, permitting under the Clean Air Act does not apply to the unit. The unit has a responsibility to comply with any emissions generated which are regulated under the NESHAP program, including asbestos, benzene, and radionuclides. Except during a catastrophic incident, the potential to emit these materials from the 305-B unit is minimal. Catastrophic incidents are dealt with in the unit contingency plan in Chapter 7. At the Hanford Site, the Tri-County Air Pollution Control Authority oversees site compliance with CAA regulations dealing with hazardous materials; the Washington Department of Health oversees compliance with radionuclide CAA regulations.

- E. Add a new Section 13.2, p. 13-1, as follows:

13.2 CLEAN WATER ACT

Operation of the 305-B Storage Unit will not result in any point source or nonpoint source discharges to surface waters. As such, National Pollutant Discharge Elimination System permits are not required. Spill reporting requirements of the CWA are covered in the unit contingency plan in Chapter 7.

- F. Add a new Section 13.8, p. 13-2, as follows:

13.8 TOXIC SUBSTANCES CONTROL ACT

Wastes containing PCBs which are subject to regulation under the Toxic Substance Control Act (TSCA) are stored in the 305-B Storage Unit. These wastes are stored for periods less than one year before shipment to a disposal facility permitted under TSCA. Storage of PCB wastes in 305-B for periods less than one year will continue to be done in compliance with applicable TSCA regulations in 40 CFR Part 761.

- G. Add a new Section 13.9, p. 13-2, as follows:

13.9 OTHER REQUIREMENTS

The application of insecticides and herbicides on or in the immediate vicinity of the 305-B Storage Unit will be conducted in compliance with the Federal Insecticide, Fungicide, and Rodenticide Act of 1975, TSCA, and the applicable provisions of the Washington State Water Quality Standards, WAC 173-201.

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United States Department of Energy, Richland Operations Office (DOE-RL). DOE-RL has been issued a single EPA identification number for all regulated dangerous waste management activities (generation, transportation, recycling, treatment, storage, and disposal) occurring on the Hanford Site.

1.4.5 Off-Site

The term "off-site" [facility] refers to waste generators, transporters, recyclers, and TSD facilities not defined as "on-site" in Section 1.4.6.

1.4.6 On-Site

The term "on-site" [facility] refers to waste generators, transporters, recyclers, and TSD facilities which are:

- Located on the Hanford Site or on other Tri-Cities properties owned or leased by DOE-RL or its contractors, and
- Co-operated by one of DOE-RL's contractors.

1.4.7 Unit

The term "unit" (or "waste management unit") is used throughout the application to refer to the physical location, building and equipment comprising the 305-B Storage Unit or, in selected instances, other on-site TSD units. It may be inferred to have the same meaning as the term "dangerous waste management unit" as defined in WAC 173-303-040.

1.5.1.2 Modifications With Ecology's Prior Approval. Certain modifications may be processed as "minor modifications" per WAC 173-303-830(4), but require prior submittal for Ecology's approval. If Ecology does not respond within 30 days from their receipt of the proposed modification, the modification will take effect as a minor modification. At the end of the 30-day period, the revised page(s) must be incorporated in all outstanding controlled copies of the document (including those distributed to EPA and Ecology). Revisions meeting this criterion are as follows:

- Addition and/or deletion of dangerous waste codes for waste to be stored
- Changes in the annual quantities of regulated waste to be handled
- Changes to the 305-B site and/or buildings and associated changes to drawings
- Revision of forms included in this permit application

1.5.2 Other Modifications

Modifications not allowed to take place as "minor modifications" per WAC 173-303-830(4) as noted above must follow the modification procedures specified in WAC 173-303-830(3).

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